AMENDMENTS TO THE CLAIMS:

1. (Currently Amended) An apparatus for plasma doping, comprising:

a vacuum container defining a chamber therein, the container having a portion made of a dielectric material and bearing an impurity to be doped in a substrate provided in the chamber; and

a plasma source operable to generate ~~for generating~~ a plasma in the chamber by forming an electric field through the portion of the container, so as to cause ~~causing~~ ion in the plasma to impinge against the portion of the container to draw the impurity out of the portion of the container into the chamber,

wherein the dielectric material comprises one of silicone, silica glass and silicon nitride, and

wherein the impurity comprises one of arsenic, phosphorus, boron, aluminum and antimony.

2. (Currently Amended) An apparatus ~~of~~ according to claim 1, wherein the impurity is deposited on a surface of the portion of the container.

3. (Currently Amended) An apparatus ~~of~~ according to claim 1, wherein the impurity is provided inside the portion of the container.

4. (Currently Amended) An apparatus ~~of~~ according to claim 1,

wherein the plasma source ~~has~~ comprises:

a coil or antenna; and

a power source ~~for applying~~ operable to apply a high frequency power to ~~one~~ a first end of the coil or antenna ~~and thereby generating~~ so as to generate the plasma in the chamber,

wherein the power source ~~having~~ comprises a first power supply ~~for supplying~~ operable to supply a first power with a first frequency (f1) and a second power supply ~~for supplying~~ operable to supply a second power with a second frequency (f2).

5. (Currently Amended) An apparatus ~~of~~ according claim 4, wherein ~~the other~~ a second end of the coil or antenna is grounded.

6. (Currently Amended) An apparatus ~~of~~ according to claim 1,

wherein the plasma source ~~has~~ comprises:

a coil or antenna[[,]];

a first power source ~~for applying~~ operable to apply a first high frequency power to the coil or antenna ~~and thereby generating~~ so as to generate the plasma in the chamber[[,]];

a biasing electrode provided between the coil or antenna and the portion of the container; and

a second power source ~~for applying~~ operable to apply a second high frequency power to the biasing electrode.

7. (Original) A device having a part or a whole of the substrate to which the impurity is doped by means of the apparatus in claim 1.

8. (New) An apparatus for plasma doping, comprising:

a vacuum container defining a chamber therein, the container having a portion made of a dielectric material and bearing an impurity to be doped in a substrate provided in the chamber; and

a plasma source operable to generate a plasma in the chamber by forming an electric field through the portion of the container, so as to cause ion in the plasma to impinge against the portion of the container to draw the impurity out of the portion of the container into the chamber,

wherein the plasma source is operable to draw out the impurity from the portion of the container such that the impurity is implanted into the substrate in a substantially even manner.

9. (New) An apparatus according to claim 8, wherein the impurity is deposited on a surface of the portion of the container.

10. (New) An apparatus according to claim 8, wherein the impurity is provided inside the portion of the container.

11. (New) An apparatus according to claim 8,

wherein the plasma source comprises:

a coil or antenna; and

a power source operable to apply a high frequency power to a first end of the coil or antenna so as to generate the plasma in the chamber,

wherein the power source comprises a first power supply operable to supply a first power with a first frequency (f1) and a second power supply operable to supply a second power with a

second frequency (f2).

12. (New) An apparatus according to claim 11, wherein a second end of the coil or antenna is grounded.

13. (New) An apparatus according to claim 8,

wherein the plasma source comprises:

a coil or antenna;

a first power source operable to apply a first high frequency power to the coil or antenna so as to generate the plasma in the chamber;

a biasing electrode provided between the coil or antenna and the portion of the container; and

a second power source operable to apply a second high frequency power to the biasing electrode.